



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/764,377	01/19/2001	Shuichi Sakamoto	500.39531X00	7664

20457 7590 07/19/2004

ANTONELLI, TERRY, STOUT & KRAUS, LLP  
1300 NORTH SEVENTEENTH STREET  
SUITE 1800  
ARLINGTON, VA 22209-9889

EXAMINER

DEMICCO, MATTHEW R

ART UNIT PAPER NUMBER

2611

DATE MAILED: 07/19/2004

4

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/764,377

Applicant(s)

SAKAMOTO ET AL.

Examiner

Matthew R Demicco

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 January 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Drawings***

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: Figure 3, 303; Figure 9, 901; Figure 10, 1001. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

3. Claims 3, 6 and 8 are objected to because of the following informalities: Applicant discloses a "means for storing an address for identifying the video content play terminal issued the video content transmission request..." The examiner believes that this should more appropriately read --the video content play terminal **that** issued the video content transmission request--. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claim 12, Applicant discloses a method wherein the table for storing information of a network protocol “can change a name of a network protocol in accordance with the request by the video content play terminal and a network infrastructure.” The Examiner deems this to be indefinite, as it does not clearly define what the invention does. For the purpose of examination, “can change a name of a network protocol,” will be interpreted as “can select a network protocol”.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

7. Claims 4 and 10 are rejected under 35 U.S.C. 102(a) as being anticipated by U.S. Patent No. 6,014,694 to Aharoni et al.

Regarding Claim 4, Aharoni discloses a video content transmitting system (See Figure 2) having at least one video content transmitting server (18) and being capable of

Art Unit: 2611

transmitting requested video contents in response to a request from a video content play terminal (Col. 11, Lines 26-30) connected via a network to at least one video content transmitting server (See Figure 1), the system comprising a means for managing information of a total available bandwidth for video content transmission of a network route between each terminal and server and information of a bandwidth now in use for video content transmission (Col. 3, Lines 17-18, Col. 7, Lines 36-40, Col. 8, Lines 9-11 and Cols. 13-17). Aharoni further discloses bandwidth-calculating means for calculating a bandwidth of the network route to be used for transmission of requested video contents and transmission processing means for determining the video content transmitting server capable of transmitting the requested video contents to the terminal (Cols. 4-5, Lines 59-13 and Col. 18, Lines 56-59) in accordance with the total available bandwidth (Col. 7, Lines 36-40), bandwidth now in use (Col. 5, Lines 12-13) and calculated bandwidth necessary for transmission (Col. 12, Lines 1-26 and Col. 19, Lines 35-41).

Regarding Claim 10, see Claim 4 above.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aharoni et al.

Regarding Claim 5, Aharoni discloses a system as stated above in Claim 4 wherein a rate controller (Col. 18, Lines 56-59) performs the bandwidth measurements and server selection. This controller therefore reads on the claimed bandwidth information managing means including storing information indicative of a relation between each network route, the total available bandwidth and the bandwidth now in use as stated above in Claim 4. What is not disclosed, however, is that bandwidth information managing means includes a table. Official Notice is hereby taken that it is well known in the art to use a table to store data in a computer-based device. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Aharoni with the table of the well-known prior art in order to store information in a easily accessible data structure for quick storage, search and retrieval.

Regarding Claim 6, Aharoni discloses a system as stated above in Claim 4. What is not disclosed, however, is that the network includes at least a first network and a second network, in one transmission mode, the first network is used when a video content transmission request is transmitted to the video content transmitting system from the terminal and the second network is used when the video contents are transmitted from the server to the terminal in response to the request further comprising means for storing an address for identifying the terminal that issued the request via the first network and an address for identifying the video terminal receiving the video contents via the second network and means for determining the video content destination address to which the video contents are transmitted in accordance with the stored address of the terminal on the first and second networks. Official Notice is hereby taken that it is well known in the

Art Unit: 2611

art that a first and second network may be used, wherein a lower bandwidth network, such as a POTS-based modem, is used to for upstream transmissions (terminal request) and a higher bandwidth, such a unidirectional cable modem or satellite receiver, is used for downstream transmissions (receiving data). This reads on the claimed at least a first network and a second network, in one transmission mode, the first network is used when a video content transmission request is transmitted to the video content transmitting system from the terminal and the second network is used when the video contents are transmitted from the server to the terminal in response to the request. Further, it is inherent in such a system that the addresses of the client be known by the server in order to receive the request on the first network and transmit the video to the correct destination on the second network. This reads on the claimed means for storing an address for identifying the terminal that issued the request via the first network and an address for identifying the video terminal receiving the video contents via the second network and means for determining the video content destination address to which the video contents are transmitted in accordance with the stored address of the terminal on the first and second networks. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Aharoni with the multiple networks of the well-known prior art in order to implement real-time video delivery in a network where high speed bi-directional communication is not available due to limitations in the network infrastructure.

Art Unit: 2611

10. Claims 1-3, 7-9 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aharoni et al. in view of U.S. Patent No. 6,658,476 to Van.

Regarding Claim 1, Aharoni discloses a video content transmitting system as stated above in Claim 4. What is not disclosed, however, is means for storing information of a network protocol capable of video content transmission between the terminal and the server and a means for determining the server capable of transmitting video content to a relevant terminal requesting video content transmission in accordance with the network protocol information stored in the storing means. Van discloses a client-server protocol support list wherein a server transmits a list of supported protocols in order of preference to a client (See Abstract). The client is able to query a server to determine the list of protocols supported (Col. 2, Lines 56-61) and then can select the best protocol to use (Col. 7, Lines 1-6). The list of protocols is stored on the server (Col. 7, Lines 27-29). This reads on the claimed storing information of a network protocol capable of content transmission between the terminal and the server and means for determining the server capable of transmitting content to the terminal requesting transmission in accordance with the protocol information stored in the storing means. In conjunction with Aharoni, the data is video content. Van is evidence that ordinary workers in the art would recognize the benefits of providing multiple protocols and allowing a client to determine which server protocol to use. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Aharoni with the multiple protocols and protocol determination of Van in order to request



and receive video using the most desirable protocol to maximize speed, reliability (Col. 7, Line 5), protocol richness and security (Col. 5, Line 67).

Regarding Claim 2, Aharoni in view of Van disclose a system as stated above in Claim 1. Van further discloses that the server stores a list of available protocols as stated above. What is not disclosed, however, is that network protocol information storing means includes a table. Official Notice is hereby taken that it is well known in the art to use a table to store data in a computer-based device. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Aharoni in view of Van with the table of the well-known prior art in order to store information in a easily accessible data structure for quick storage, search and retrieval. This reads on the claimed network protocol information storing means including a table storing a name of each network protocol capable of video content transmission between the terminal and the server.

Regarding Claim 3, see Claim 6 above.

Regarding Claim 7, Aharoni in view of Van disclose a system as stated above in Claim 1. Aharoni further discloses means for managing information of a total available bandwidth for video content transmission of a network route between each terminal and server and information of a bandwidth now in use for the video content transmission as stated above in Claim 4. Further disclosed is a bandwidth calculating means and transmission processing means as stated above in Claim 4.

Regarding Claim 8, see Claim 6 above.

Regarding Claim 9, see Claim 1 above.

Art Unit: 2611

Regarding Claim 11, see Claim 7 above.

Regarding Claim 12, as best understood by the Examiner, Aharoni in view of Van discloses a method as stated above in Claim 11. Van further discloses that a client is operable to select a protocol that it supports (Col. 2, Lines 56-63) but may default to a lower level protocol (Col. 7, Lines 1-11). It is inherent that the client would be operable to select a protocol that is compatible with the network infrastructure (i.e. a protocol that functions over TCP/IP) in order to properly communicate with the server. This reads on the claimed table for storing information of a network protocol usable for video content transmission between the video terminal and the video content transmitting terminal can change a name (select) a network protocol in accordance with the request by the play terminal and a network infrastructure.

### *Conclusion*

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. U.S. Patent No. 5,583,995 to Gardner et al. discloses a method of monitoring the available bandwidth of a plurality of servers and balancing the requests of clients such that the data rates are optimal for all points in the system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew R Demicco whose telephone number is (703) 305-8155. The examiner can normally be reached on Mon-Fri, 9am - 5pm.


Art Unit: 2611

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on (703) 305-4380. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



mrd  
July 6, 2004



VIVEK SRIVASTAVA  
PRIMARY EXAMINER